

TITLE 18. ENVIRONMENTAL QUALITY**CHAPTER 6. DEPARTMENT OF ENVIRONMENTAL QUALITY
PESTICIDES AND WATER POLLUTION CONTROL****ARTICLE 1. NUMERIC VALUES AND INFORMATION
SUBMITTAL**

Article 1 consisting of Sections R18-6-101 through R18-6-105 adopted effective May 10, 1988.

Section

- R18-6-101. Definitions
- R18-6-102. Information submittal
- R18-6-103. Specific numeric values
- R18-6-104. Field studies, monitoring and testing
- R18-6-105. Listing or deleting of pesticides on the groundwater protection list
- R18-6-106. Additional Informational Requirements; Pesticide Formulators

**ARTICLE 2. PESTICIDE CONTAMINATION
PREVENTION**

Article 2 consisting of Section R18-6-201 repealed effective September 23, 1992 (Supp. 92-3).

Article 2 consisting of Section R18-6-201 adopted effective August 27, 1987.

Section

- R18-6-201. Repealed

ARTICLE 3. GROUNDWATER PROTECTION LIST

Article 3 consisting of Section R18-6-302 adopted effective May 10, 1988.

Section

- R18-6-301. Groundwater Protection List
- R18-6-302. Findings and determinations to be made by the Director
- R18-6-303. Requirements for Reporting on Pesticides on the Groundwater Protection List

**ARTICLE 1. NUMERIC VALUES AND INFORMATION
SUBMITTAL****R18-6-101. Definitions**

In addition to the definitions contained in A.R.S. § 49-301, the words and phrases in this Chapter shall have the following meaning:

1. "Active ingredient" means all of the following:
 - a. In the case of a pesticide other than a plant regulator, defoliant, or desiccant, an ingredient which will prevent, destroy, repel or mitigate any pest.
 - b. In the case of a plant regulator, an ingredient which, through physiological action, will accelerate or retard the rate of growth or rate of maturation or otherwise alter the behavior of ornamental or crop plants or the product thereof.
 - c. In the case of a defoliant, an ingredient which will cause the leaves or foliage to drop from a plant.
 - d. In the case of a desiccant, an ingredient which will artificially accelerate the drying of plant tissue.
2. "Agricultural use pesticide" means any pesticide intended for use directly in the commercial production of plants and animals. It does not include animal pesticide ear tags, or pesticides intended solely for use within and around confined structures.

3. "Applicator" means any person who applies, or causes to have applied, any agricultural use pesticide whether for his own use or on the property of other persons.
4. "Applicator certification number" means a number issued by the Arizona Department of Agriculture and assigned to an applicator for the purposes of applying or supervising the application of a restricted use pesticide.
5. "Carcinogenic" means that property of a substance which causes cancer in humans.
6. "Crop" means the commodity upon which a pesticide is to be applied.
7. "Custom applicator license number" means a number issued by the Arizona Department of Agriculture and assigned to a person for the purposes of applying pesticides for hire or by air.
8. "Data generator" means any person providing information to support the registration in this state of an agricultural use product pursuant to the requirements of A.R.S. § 49-302(A).
9. "Dealer" means a person or persons engaging in the distribution and sale of agricultural use pesticides.
10. "Department" means the Department of Environmental Quality.
11. "Director" means the Director of the Department of Environmental Quality.
12. "EPA" means the United States Environmental Protection Agency.
13. "Field studies" means studies conducted under actual field conditions that replicate those circumstances under which a pesticide is normally used, to determine the mobility and persistence of the pesticide pursuant to A.R.S. §§ 49-307 and 49-225.
14. "Final sale" means the final sale prior to the application of the agricultural use pesticide to the agricultural crop.
15. "Formulator" means any person who purchases an EPA-registered pesticide to reformulate or repackage and register for sale in this state.
16. "Grower" means a person who makes purchases of agricultural use pesticides or contracts for the application of agricultural use pesticides to commercial agricultural commodities, as part of the person's normal course of employment or activity as an owner, lessee, sublessee, share cropper or manager of land upon which application of pesticides is made.
17. "Grower's permit number" means a number issued by the Arizona Department of Agriculture and assigned to a particular organization, cooperative, or establishment, for the purpose of purchasing pesticides which are to be used on agricultural commodities for pest control.
18. "Label" means the written, printed, or graphic matter on, or attached to, the pesticide or device or any of its containers or wrappers.
19. "Labeling" means all labels and all other written, printed, or graphic matter either accompanying the pesticide or device at any time or to which reference is made on the label or in literature accompanying the pesticide or device, except to current official publications of the Environmental Protection Agency, the United States Departments of Agriculture and Interior, the Department of Health and Human Services, state experiment stations, state agricultural colleges, and other similar federal or

state institutions or agencies authorized by law to conduct research in the field of pesticides.

20. "Mutagenic" means that property of a substance which causes genetic change or alteration in humans.
21. "New pesticide" means any pesticide not registered in Arizona before December 1, 1987. A formulation consisting entirely of a mixture of active or specified ingredients previously registered in Arizona, and for which numeric values required by A.R.S. § 49-303 have been accepted by the Department, shall not be considered a new pesticide.
22. "Nonagricultural use pesticide" means any pesticide not included within the definition of "agricultural use pesticide".
23. "Pest" means any undesirable insect, vertebrate, nematode, fungus, weed, or any other form of terrestrial or aquatic plant or animal life or virus, bacteria, or any other microorganism, except on or in living man, that is, or may be, injurious to vegetation, humans, animals, households or is, or may be, injurious when present in any environment.
24. "Restricted use pesticide" means a pesticide classified as such by the EPA.
25. "Seller's permit number" means a number issued by the Arizona Department of Agriculture and assigned to a particular organization, cooperative or establishment, for the purpose of selling or offering to sell pesticides in the state except as exempted under R3-10-209(B).
26. "Soil-applied" means a pesticide which is intended to be applied to or injected into the soil by ground-based application equipment or by chemigation, or the label of the pesticide requires or recommends that the application be followed within 72 hours by flood or furrow irrigation.
27. "Supplier" means a person engaged in the sale of a pesticide to another person for the purpose of reformulation or repackaging and registering for sale in this state.
18. "Teratogenic" means that property of a substance that can cause fetal malformations in humans.
29. "Toxic to humans" means that property of a substance which causes, when present in sufficient concentration, an adverse effect in humans if ingested, inhaled, or otherwise absorbed into the human body.

Historical Note

Adopted effective May 10, 1988 (Supp. 88-2). Amended effective September 23, 1992 (Supp. 92-3).

R18-6-102. Information submittal

- A. An initial information submittal shall consist of a transmittal letter and a completed three-page tabular summary form, with the studies required pursuant to A.R.S. § 49-302 attached. A pesticide registrant shall submit the information specified in A.R.S. § 49-302(A) for each active ingredient in each agricultural use pesticide registered by that pesticide registrant for use in this state. A three-page tabular summary form shall be provided by the Director to facilitate compliance with this requirement. The summary form shall contain the following:
 1. Company name and address.
 2. Name and telephone number of person making the submittal.
 3. Date of filing.
 4. Product information (brand name, Environmental Protection Agency registration number, formulation category, and intended use).
 5. Active ingredient (technical name, Chemical Abstract Service (CAS) No., and common name), and, in addition

to information required by A.R.S. § 49-302, the following regarding each active ingredient:

- a. Molecular weight.
- b. Bulk density.
- B. The information required in A.R.S. § 49-302 shall be submitted when an agricultural use pesticide is first registered in the state of Arizona and at the time of the annual registration process if new or amended information is available for a pesticide or active ingredient.
- C. The registration of a new pesticide shall not be granted until the Director determines both of the following:
 1. That a groundwater protection data gap does not exist for any active ingredient in the new pesticide.
 2. Whether the new pesticide will be added to the Groundwater Protection list.
- D. A request for a time extension for submitting information required by A.R.S. § 49-302(A)(6) shall be in writing and shall identify the pesticide registrant, the pesticide product, the address of the registrant, the reason or reasons why such an extension is warranted, and the status of ongoing dissipation studies. Any communication by the Director with a pesticide registrant approving or denying a time extension shall be in writing.
- E. If a pesticide registrant fails to request an extension as provided by A.R.S. § 49-302(D) and (E), fails to submit all of the information as required by A.R.S. § 49-302(A) and (B), or fails to submit data which is valid, complete and adequate, the pesticide registrant shall be notified by the Department that a groundwater protection data gap exists pursuant to A.R.S. § 49-304. Failure to respond to the notification shall result in cancellation or denial of registration pursuant to A.R.S. § 49-306.
- F. If a pesticide registrant fails to submit the information required by A.R.S. § 49-302 and this Article, the Director may determine that an active ingredient or pesticide is critical to agricultural production in Arizona. Any interested party may request this determination from the Director. In order to determine that an active ingredient or pesticide is critical to agricultural production in Arizona, the Director shall find either of the following:
 1. There is no economical, practical and effective alternative method or practice of pest control available, and the gross dollar value of annual agricultural production supported by the pesticide exceeds the cost of securing the information.
 2. The pesticide is needed to support a new or developing crop as identified by a public or private research agency or educational institution.
- G. If the Director determines that an active ingredient or a pesticide is critical to agricultural production in this state, and if the Director determines that an appropriate amount of funding is available through the methods described in A.R.S. § 49-306(C), the Director shall obtain and file the information required by A.R.S. § 49-302 for that active ingredient or pesticide.
- H. Whenever the Director undertakes the filing of information as described in subsections (F) and (G), the Director shall notify in writing the registrant of the pesticide or the active ingredient of his finding and his intent to file the required information. In addition, the Director shall notify any other persons who have requested in writing that they be notified of the Director's determination that a pesticide is critical to agriculture.
- I. A dispute regarding costs assessed against a pesticide registrant to cover the costs accrued by the Department in obtaining and filing information in the manner described in subsections (F) and (G) shall be submitted by the registrant or

Department of Environmental Quality - Pesticides and Water Pollution Control

the Director to mediation under the Commercial Mediation Rules, The American Arbitration Association, New York, New York (October 1987) (and no future editions), which is incorporated by reference and on file with the Office of the Secretary of State and with the Department.

Historical Note

Adopted effective May 10, 1988 (Supp. 88-2). Amended effective September 23, 1992 (Supp. 92-3).

R18-6-103. Specific numeric values

Each pesticide registered for agricultural use in Arizona shall be evaluated on the basis of the following specific numeric values pursuant to A.R.S. § 49-303:

<u>PROPERTY</u>	<u>SPECIFIC NUMERIC VALUES</u>
Water solubility	No greater than 30 ppm
Soil absorption coefficient	Kd no less than 5
Hydrolysis	Half life no greater than 25 weeks
Aerobic soil metabolism	Half life no greater than 3 weeks
Anaerobic soil metabolism	Half life no greater than 3 weeks
Field dissipation	Half life no greater than 3 weeks

Historical Note

Adopted effective May 10, 1988 (Supp. 88-2).

R18-6-104. Field studies, monitoring and testing

- A. The Director shall conduct field studies for pesticides placed upon the Groundwater Protection List as required by A.R.S. § 49-307(A).
- B. For each agricultural use pesticide, the Director shall use the results of soil and groundwater monitoring and testing to make the determinations required by A.R.S. §§ 49-307(C), 49-308(A) and (B), and 49-309(A), (B), or (D).
- C. For each nonagricultural use pesticide, the Director shall use the results of soil and groundwater monitoring and testing to make determinations identical to those required by subsection (B) for an agricultural use pesticide.
- D. If the determinations listed in subsection (C) cannot be made after study and monitoring, the Director shall follow the procedures for deleting described in R18-6-105.

Historical Note

Adopted effective May 10, 1988 (Supp. 88-2).

R18-6-105. Listing or deleting of pesticides on the groundwater protection list

- A. The Director shall add an agricultural use pesticide to the Groundwater Protection List for any of the following reasons:
 1. A complete dissipation study is not submitted for a pesticide as required by A.R.S. § 49-302(A)(6).
 2. A pesticide fails to comply with the specific numeric values established in R18-6-103.
 3. A pesticide active ingredient is detected consistent with the testing requirements of R18-6-104 and is found under conditions described in A.R.S. § 49-308(A).
 4. A pesticide degradation product or other specified ingredient is detected consistent with the requirements of R18-6-104, where the pesticide degradation product or other specified ingredient poses a threat to public health pursuant to A.R.S. § 49-308(A)(3) and has been found under the conditions described in paragraph (3) of this subsection.
- B. The Director shall add a nonagricultural use pesticide to the Groundwater Protection List for any of the following reasons:

1. The detection of a pesticide active ingredient under conditions identical to those given for an agricultural use pesticide under A.R.S. § 49-308(A).
 2. The detection of a pesticide degradation product or other specified ingredient consistent with the requirements of R18-6-104, where the pesticide degradation product or other specified ingredient poses a threat to public health and has been found under the conditions described in paragraph (1) of this subsection.
- C. The Director may remove a pesticide from the Groundwater Protection list under any of the following circumstances:
1. In the case of agricultural use pesticide, the pesticide is no longer considered to have the potential to pollute groundwater due to a change in a specific numeric value established in R18-6-103, or due to a revision in the specific numeric values for an active ingredient established by new research studies.
 2. In the case of a nonagricultural use pesticide, the manufacturer has modified the pesticide label and has demonstrated that future applications will not result in a potential to pollute groundwater in this State.
 3. In the case of a nonagricultural use pesticide, monitoring and testing results establish that:
 - a. A degradation product or other specified ingredient of the pesticide does not pose a threat to public health.
 - b. The pesticide active ingredient, other specified ingredient, or degradation product found in the soil or groundwater, or both, either has not polluted, or does not threaten to pollute, the groundwater of this State.
 4. The registration of the pesticide has been cancelled under either of the following circumstances:
 - a. The State Chemist has cancelled the registration of the pesticide pursuant to A.R.S. §§ 3-343(C), 3-351(1), 49-306, or 49-309.
 - b. The registration of the pesticide has been voluntarily cancelled by the registrant.
- D. Any person may petition the Director to add or delete a pesticide to or from the Groundwater Protection List. Such a request shall be consistent with the procedures for rule making and petitioning prescribed by A.R.S. § 41-1033 and shall consist of a written request to add or delete the substance with reasons for the request. In determining whether to grant or deny the petition, the Director shall consider the following:
1. Whether the petitioner has supported the petition for the adoption of a rule with documentation in the form of information studies, and conclusions, based upon procedures consistent with those described in A.R.S. §§ 49-301 through 49-309 and R18-6-104.
 2. Whether the supporting documentation demonstrates that the substance should be added to or deleted from the Groundwater Protection List.

Historical Note

Adopted effective May 10, 1988 (Supp. 88-2).

R18-6-106. Additional Informational Requirements; Pesticide Formulators

- A. Subject to the provisions of this Section, a pesticide formulator may rely upon the data generated by any person to meet the requirements of R18-6-102. A pesticide formulator shall submit to the Department the name of each source of each active ingredient in each agricultural use pesticide registered by that formulator for use in this state.
- B. The Department shall request each source identified by the pesticide formulator to verify within 30 days, in writing, that

they provide the pesticide formulator with the active ingredient in question.

- C. If the source identified by the pesticide formulator advises the Department that they are not a source of the active ingredient for the pesticide formulator, the Department shall notify the pesticide formulator of that fact and shall require further documentation of a business relationship involving the active ingredient in question. This documentation will take the form of a copy of a confidential statement of formula, a signed contract, or any other documentation of a business arrangement, endorsed by each party.
- D. If the pesticide formulator does not produce acceptable documentation of a business relationship pursuant to subsection (C) of this Section or if the source identified by the pesticide formulator is not a data generator for the active ingredient in question, the Department shall find that a data gap exists for the formulator's agricultural use pesticide, pursuant to A.R.S. § 49-301(4) and subject to the provisions of A.R.S. § 49-304.
- E. Any pesticide formulator relying on data submitted by identified sources shall notify the Department of any changes in a source within 60 days of a similar notification to the EPA.

Historical Note

Adopted effective September 23, 1992 (Supp. 92-3).

ARTICLE 2. PESTICIDE CONTAMINATION PREVENTION

R18-6-201. Repealed

Historical Note

Adopted effective August 27, 1987 (Supp. 87-3).

Repealed effective September 23, 1992 (Supp. 92-3).

ARTICLE 3. GROUNDWATER PROTECTION LIST

R18-6-301. Groundwater Protection List

The following pesticides are on the Groundwater Protection List because they have been identified pursuant to A.R.S. §§ 49-305 and 49-303(B)(2) following evaluation on the basis of criteria given in R18-6-103 and R18-6-105.

2,4-D Acid
 2,4-D Alkanol-amine salts of ethanol and isopropanol
 2,4-D Alkyl amine salt
 2,4-D Alkyl amine
 2,4-D Butoxyethyl ester
 2,4-D Butyl ester
 2,4-D DDA (Dodecylamine salt)
 2,4-D Diethanolamine salt
 2,4-D Dimethylamine salt
 2,4-D Ethylhexyl ester
 2,4-D Isobutyl ester
 2,4-D Isooctyl (2-Ethyl-4-Methylpentyl) ester
 2,4-D Isooctyl (2-Ethylhexyl) ester
 2,4-D Isopropylamine salt
 2,4-D N-Oleyl-1,3-Propylenediamine salt
 2,4-D TDA (Tetradecylamine)
 2,4-D Triethylamine salt
 2,4-D Triisopropanolamine salt
 2,4-DB butoxyethyl ester
 2,4-DB, DMA salt
 1,2-Dichloropropene
 Acephate
 Acrolein
 Alachlor
 Aldicarb
 Ametryn
 Amitrole

Arsenic Acid
 Asulam, sodium salt
 Atrazine
 Azinphos-methyl
 Bendiocarb
 Benomyl
 Bromacil
 Butylate
 Cacodylic Acid
 Captan
 Carbaryl
 Carbofuran
 Carboxin
 Chlorothalonil
 Chlorsulfuron
 Copper sulfate
 Cyanazine
 Cycloate
 Cyromazine
 Diazinon
 Dicamba acid
 Dicamba, DEA salt
 Dicamba, DMA salt
 Dicambe, potassium salt
 Dicamba, sodium salt
 Dichlobenil
 Dicloran
 Diethathyl ethyl
 Difenzoquat methyl sulfate
 Dimethoate
 Diphenamid
 Diquat dibromide
 Diuron
 DPX-M6316
 Endosulfan
 Endothall
 Endothall, dipotassium salt
 Endothall, disodium salt
 EPTC
 Ethephon
 Ethofumesate
 Ethoprop
 Ethyl parathion
 Etridiazole
 Fenamiphos
 Fenarimol
 Fluazifop-p-butyl
 Fluazifop-r-butyl
 Flucythrinate
 Fluometuron
 Fluridone
 Fosamine ammonium
 Fosetyl-Al
 Glyphosate, isopropylamine salt
 Hexazinone
 Imazamethabenz - methyl (meta)
 Imazamethabenz - methyl (para)
 Imazalil
 Imazaquin
 Isazofos
 Lindane
 Linuron
 Malathion
 Maleic hydrazide, potassium salt
 MCPA
 MCPA - DMA salt

Department of Environmental Quality - Pesticides and Water Pollution Control

MCPA - isooctyl ester
 MCPA - sodium salt
 Mepiquat chloride
 Metaldehyde
 Metalaxyl
 Metam - Na
 Methamidophos
 Methiocarb
 Methomyl
 Methyl parathion
 Metolachlor
 Metribuzin
 Metsulfuron methyl
 Mevinphos
 Monocrotophos
 Myclobutanil
 Napropamide
 Norflurazon
 Oryzalin
 Oxamyl
 Oxydemeton-methyl
 Paraquat
 Pebulate
 Phosmet
 Phosphamidon
 Picloram
 Picloram, isooctyl ester
 Picloram, triisopropanalumine salt
 Picloram, potassium salt
 Piperonyl butoxide
 Profenofos
 Prometon
 Prometryn
 Proamide
 Propamocarb
 Propiconazole
 Pyrazon
 Sethoxydim
 Simazine
 Sodium bentazon
 Sodium chlorate
 Sulfometuron-methyl
 Sulprofos
 Tebuthiuron
 Terbacil
 Terbufos
 Terbutryn
 Thidiazuron
 Thiodicarb
 Thiophanate-methyl
 Thiram
 Triadimefom
 Trichlorfon
 Trichlpyr
 Triclopyr, butoxyethyl ester
 Triclopyr, triethylamine salt
 Triforine
 Vernolate
 Vinclozolin

Historical Note

Adopted effective September 23, 1992 (Supp. 92-3).

R18-6-302. Findings and determinations to be made by the Director

- A. If the Director makes the determinations described in R18-6-104(B) or (C), the Director shall immediately notify the

registrant in writing of these determinations. The status of the registration of the pesticide shall be determined under A.R.S. § 49-309.

- B. If the Department discovers or otherwise becomes aware of the illegal sale or use of any pesticide on the Groundwater Protection List, such sale or use shall be reported by the Director to the appropriate regulatory agency and to the Office of the Attorney General.
- C. If an active ingredient, degradation product or other specified ingredient of a pesticide has been detected under conditions specified in R18-6-104 but did not result from use in accordance with the pesticide label, then the Director shall refer any findings to the appropriate state or federal agency responsible for further investigation and enforcement.
- D. If the Department discovers a site which may demonstrate pesticide contamination, the Director shall determine whether remedial actions under A.R.S. § 49-282 are appropriate.

Historical Note

Adopted effective May 10, 1988 (Supp. 88-2). Amended effective September 23, 1992 (Supp. 92-3).

R18-6-303. Requirements for Reporting on Pesticides on the Groundwater Protection List

- A. A pesticide dealer shall file quarterly reports with the Director postmarked within 30 days after the end of a calendar quarter (March 31, June 30, September 30, and December 31) indicating the quantity and date of sales of agricultural use pesticides on the Groundwater Protection List that are soil-applied. A report is required only from a pesticide dealer who makes the final sale prior to use. Reports shall be made on forms prescribed by the Director and shall contain all of the following:
1. Name of dealer and seller's permit number;
 2. Date of sale;
 3. Name of purchaser and grower's permit number;
 4. Product brand name and EPA registration number;
 5. Active ingredients;
 6. Formulation category (e.g., wettable powder, granular, emulsifiable concentrate, etc.);
 7. Quantity sold;
 8. Signature of dealer, grower or anyone who causes to apply.
- B. A pesticide applicator shall report the use of any agricultural use pesticide on the Groundwater Protection List that is soil-applied. A report shall be filed on a form prescribed by the Director and shall be postmarked no later than the first Monday following the date of the pesticide application. If the first Monday following the date of the pesticide application is a holiday, the report shall be postmarked no later than the first working day following the holiday. The form shall contain the following:
1. Name of seller (dealer);
 2. Name of grower;
 3. Name of pesticide applicator (with applicator certification number, custom applicator license number, or grower permit number);
 4. Pest condition to be controlled;
 5. Crop and number of acres;
 6. Location of use (county, township, range, section);
 7. Name of the product used, including EPA Registration number;
 8. Date, time, and method of application;
 9. Amount of product applied per acre;
 10. Signature of applicator.

Historical Note

Adopted effective September 23, 1992 (Supp. 92-3).